UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/647,383	08/26/2003	Kotaro Kaneko	1011350-000320	2047

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EXAMINER
SHAN, APRIL YING

ART UNIT	PAPER NUMBER
2492	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _20 April 2011_.

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-4,11-14,19 and 24-26_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-4, 11-14, 19 and 24-26_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

1.   A Request for Continued Examination under 37 CFR 1.114, including the fee set forth in

37 CFR 1.17(e), was filed in this application after final rejection. Since this application is

eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e)

has been timely paid, the finality of the previous office action has been withdrawn pursuant to 37

CFR 1.114. Applicant's submission filed on 20 April 2011 has been entered.

2.   Claims 1, 2, 11-12, 19 and 24 have been amended. Claims 5-10, 15-18 and 20-23 have

been canceled. No new claims have been added. Claims 1-4, 11-14, 19 and 24-26 are currently

pending in the present application.

3.   Any claim objection/rejection not repeated below is withdrawn due to Applicant's

amendment.

4.   Applicant's amendments and argument have been fully considered, but are moot in view

of new ground rejection as set forth below. It is noted that Applicant's arguments are directed

towards limitations newly added via amendments.

Examiner's Note

5   "a storage unit for storing…" recited in claim 11 invokes 112 6th as the unit is non-

structural term without any structure modifiers, the unit is modified by functional language and

claim limitation does not include a structure necessary to performed the claimed function. Since

the claimed function of storing data is a general computing function, a general purpose computer

is usually sufficient for the corresponding structure. In par. [0021]-[0026] of the specification,

the Applicant discloses a general purpose computer comprising a ROM, a RAM and a hard disk.

In other words, the specification sufficiently discloses a corresponding structure to perform the

function of storing data.

Applicants are respectfully requested to confirm the above examiner's note in the next

correspondence.

Specification

6.   The specification is objected to as failing to provide proper antecedent basis for the

claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the

following is required: The "the preset list being exhaustively inclusive of every program which is

authorized to be run on said controlling apparatus" recited in claims 1, 11 and 19 lacks

antecedent basis in the specification. Note no new matter is allowed to add to the specification

while addressing this issue.

Claim Rejections - 35 USC § 103

7.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

8.   The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459

(1966), that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

1.   Determining the scope and contents of the prior art.
2.   Ascertaining the differences between the prior art and the claims at issue.
3.   Resolving the level of ordinary skill in the pertinent art.
4.   Considering objective evidence present in the application indicating obviousness
          or nonobviousness.

9.   Claims 1-3, 11-13, 19 and 24-25 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Eibach et al. (U.S. Patent No. 7,356,832) in view of Radatti (U.S. Pub. No.

20030140049) and further in view of Motoyama et al. (U.S. Patent No. 7,743,133).

As per **claims 1, 11 and 19**, Eibach et al. discloses a computer program/method/apparatus

for   controlling apparatus executing the procedures of:

storing a preset list of programs that are authorized to be run on said controlling

apparatus to control computer systems, <u>the preset list being exhaustively inclusive of</u>

<u>every program which is authorized to be run on said controlling apparatus</u> (The set of

requestable operations predefined in the access control lists are completely standard

operations – e.g. col. 5, lines 37-43, a list of permitted operations held in ROM and

configured in the static operating system of processing unit A – e.g. col. 5, lines 52-55

and in the static, real-time operating system all operations start with a predefined signal,

run for a predefined time and then ended in a predefined way. This gives behavioral

certainty and improves safety, both because of the characteristic reliability and

predictability of static operating system and because they are not tamperable. All

operations which are not within the predefined set of permitted operations can be

prevented from being performed - e.g. col. 5, line 66 – col. 6, line 8. Please note

predefined set of permitted operations in the static operating system corresponds to

Applicant's the preset list being exhaustively inclusive of every program which is

authorized to be run on said controlling apparatus);

confirming each program running on said controlling apparatus (matching a list of

permitted operations held in ROM and configured in the static operating system of

processing unit A – e.g. col. 5, lines 51-55 and this is a relative simple lookup operation –
e.g. col. 5, lines 57-58);

judging each program, which is not included in the preset list of programs that are
authorized to be run to control the computer systems among programs whose running
states have been confirmed; and inhibiting every program that is judged to be an illegal
program from being on said controlling apparatus (this is a relatively simple lookup
operation. The device control unit then operates in the relevant predefined way. All
request messages which are not defined during configuration of the static operating
system of processing unit A will be discarded, and so cannot disturb any safety-critical
functions on the vehicles internal bus – e.g. col. 5, line 57 - col. 6, line 9);

Although Eibach et al. discloses in the static, real-time operating system all
operations start with a predefined signal, run for a predefined time and then ended in a
predefined way. This gives behavioral certainty and improves safety, both because of the
characteristic reliability and predictability of static operating system and because they are
not tamperable. All operations which are not within the predefined set of permitted
operations can be prevented from being performed (e.g. col. 5, line 66 – col. 6, line 8),
malicious code and hacking (e.g. col. 2, lines 45-46) and All request messages which are
not defined during configuration of the static operating system of processing unit A will
be discarded, and so cannot disturb any safety-critical functions on the vehicles internal
bus – e.g. col. 5, line 57 - col. 6, line 9), Eibach et al. does not explicitly disclose the
application as an illegal resulting from a computer virus infection and automatically
inhibiting every program that is judged to be an illegal program from being run on said

controlling apparatus. Radatti, however, met the claimed limitation by teaching to

discover anomalous files, e.g., viruses, Trojan Horses, etc and they were not been present

in the initial secure system data file – e.g. par. [0045] and once a comparison cycle is run,

any anomalous files may be automatically deleted, any anomalous file(s) (e.g. **viruses,**

Trojan Horses, etc) may be automatically deleted and an automatic delete component

will delete any dangerous file(s) from the system - e.g. par. [0068] of Radatti).

Eibach et al. – Radatti are analogous art because they are from a similar field of

endeavor in monitoring mechanism. Thus, it would have been obvious to a person of

ordinary skill in the art, at the time of invention, to combine the teachings of Eibach et al.

with the application as an illegal resulting from a computer virus infection and

automatically inhibiting every program that is judged to be an illegal program from being

run on said controlling apparatus taught by Radatti. The motivation of doing so would

have been for securing, maintaining, monitoring and controlling computer systems (e.g.

par. [0001] of Radatti) and prevention of interference by malicious code and hacking (e.g.

col. 2, lines 45-46 and col. 6, lines 6-8 of Eibach et al.).

Although Eibach et al. discloses provision of security for control system of

vehicles and handles operations which effect the vehicle's internal device control units

(e.g. col. 1, lines 8-10 and col. 2, lines 3-5 of Eibach et al.), Eibach et al. – Radatti does

not explicitly disclose monitoring programs running on an image forming apparatus.

However, Motoyama et al. met the claimed limitation by disclosing monitoring a

software program running on an image forming apparatus (e.g. abstract).

Eibach et al. – Radatti – Motoyama et al. are analogous art because they are from

a similar field of endeavor in monitoring mechanism. Thus, it would have been obvious

to a person of ordinary skill in the art, at the time of invention, to combine the teachings

of Eibach et al. - Radatti with monitoring a software program running on an image

forming apparatus taught by Motoyama et al. in order to evaluating how a user utilizes a

software application running on an image forming apparatus (e.g. col. 2, lines 15-19 of

Motoyama et al.).

As per **claims 2, 12 and 24**, Eibach et al. - Radatti further discloses executes a

procedure of inhibiting the illegal program includes automatically deleting or isolating

the file that is judged as illegal file (are not defined during configuration of the static

operating system of processing unit A will be discarded, and so cannot disturb any safe-

critical functions on the vehicles internal bus – e.g. col. 5, lines 60-63 of Eibach et al. and

once a comparison cycle is run, any anomalous files may be automatically deleted - e.g.

par. [0068] of Radatti).

As per **claims 3, 13 and 25**, Radatti further discloses wherein the procedure of

judging includes a procedure of comparing the name of each file whose existence has

been confirmed with the name of each file included in said list (compare file names - e.g.

par. [0015] of Radatti).

10.   Claims 4, 14 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Eibach et al. (U.S. Patent No. 7,356,832)in view of Radatti (U.S. Pub. No. 20030140049) and in

view of Motoyama et al. (U.S. Patent No. 7,743,133).and further in view of Cozza (U.S. Patent

No. 5,649,095).

As per **claims 4, 14 and 26**, Although Radatti discloses judging includes a procedure of comparing the name of each file whose existence has been confirmed with the name of each file included in said list (compare file names - e.g. par. [0015]), Eibach et al. – Radatti – Motoyama et al. does not explicitly disclose comparing the size of each file whose existence has been confirmed with the size of each file included in said list. However, Cozza met the claimed limitation by teaching scanning files for computer viruses which use the length of at least one portion (such as a fork) of a file. This length information is stored in a cache. During a scan, the then current size of the file portion is compared to the length stored in the cache and if there is a size difference, the file is then scanned for virus which can change that portion of the file's size (e.g. abstract and col. 3, line 62 - col. 4, line 17 of Cozza).

It would have been obvious to a person with ordinary skill in the art at the time of the invention to incorporate Cozza's comparing the size of each file whose existence has been confirmed with the size of each file included in said list into Eibach et al. – Radatti – Motoyama et al.. The motivation of so would have been to guarantee a great scanning speed increase by eliminating unnecessary, repeat scanning in return for a very modest cost (e.g. col. 4, lines 13-16 of Cozza).

Conclusion

11.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. (See PTO-892).

Contact Information
Any inquiry concerning this communication or earlier communications from the examiner should be directed to APRIL SHAN whose telephone number is (571)270-1014. The examiner can normally be reached on Monday - Friday, 9:00 a.m. - 5:00 p.m., EST.

     If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on (571)272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

     Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/April Y Shan/
Primary Examiner, Art Unit 2492